



# 2012 ANNUAL REPORT

EXPANDING  
**FLORIDA'S AEROSPACE**  
MARKETPLACE

SPACE FLORIDA



## RICK SCOTT GOVERNOR

November 27, 2012



Dear Stakeholder,

As you will see in this Annual Report, 2011-2012 was a rewarding year for Florida's aerospace industry. The State of Florida and Space Florida continue to do what it takes to foster the growth and development of a sustainable and world-leading aerospace industry in Florida.

Our state's economy has been a challenged over the past few years. However, Space Florida, in coordination with various state agencies, made tremendous progress in attracting new businesses to the Sunshine State, while looking for tangible ways to help existing businesses continue to thrive.

During FY 2011-2012, we engaged commercial, civil and military companies from a variety of industries. Space Florida managed these leads and facilitated a number of deals with such high-profile names as The Boeing Company, XCOR Aerospace, Embraer, Lockheed Martin and many more.

This year alone, Space Florida captured projects that will lead to an estimated 1,754 jobs over the next five years. There is potential for an additional 5,903 jobs to be created through projects that Space Florida already has in its pipeline.

I look forward to what next year has in store in terms of continued job growth and prosperity for the aerospace industry facilitated by Space Florida. The organization led us through many phenomenal projects this year, and I am confident that next year will be just as (if not more) successful in ensuring the continued expansion of our aerospace economy.

Sincerely,

A handwritten signature in blue ink, likely of Rick Scott.

Rick Scott  
Governor



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**JENNIFER CARROLL**  
LIEUTENANT GOVERNOR

November 27, 2012



Dear Stakeholder,

At the closing of the 2011-2012 fiscal year, I am extremely pleased to report that Space Florida has enabled job, economic and industry growth across a number of aerospace-related sectors throughout the State of Florida. We are proud of our accomplishments this year, and much hard work has gone into creating a robust, forward-looking pipeline as well.

Space Florida engaged with many companies across our 10 industry sectors of focus. As a result, we captured a number of significant deals in 2011-2012, and were able to accomplish this by providing only 8% of the total necessary investments – showing the real power of leveraging our professional networks and unique, state-granted empowerments.

Working with such a wide variety of leading-edge companies such as Embraer, Boeing, SpaceX, XCOR Aerospace, Lockheed Martin, and Cella Energy... as well as NASA/Kennedy Space Center, Cecil Spaceport and The Center for the Advancement of Science In Space, was a true pleasure.

The State of Florida provided Space Florida with a solid budget of \$10 million during this fiscal year to fuel continued industry growth. We are proud of this budget allocation and believe it is reflective of the state's support of and belief in our accomplishments in aerospace economic development, both in the past, and in anticipation of the future.

In an extremely challenging economy, I am pleased with the accomplishments of Space Florida. Looking ahead, the opportunities are promising.

This is just the beginning of the aerospace economic recovery for the State of Florida, as we plan to go above and beyond to foster the growth and development of a sustainable and world-leading aerospace industry in our state.

Sincerely,

A handwritten signature in blue ink that reads "Jennifer Carroll".

Jennifer Carroll  
Lieutenant Governor  
Space Florida Chair



MESSAGE FROM  
SPACE FLORIDA  
PRESIDENT & CEO,  
**FRANK DiBELLO**

November 27, 2012



Space Florida Stakeholders,

We've had an excellent year at Space Florida. Even in the challenging economic climate that continues its recovery here in our state, we have worked closely with federal, state and local leaders, as well as numerous partners in industry and our financial networks to leverage significant benefit for Florida.

We achieved solid wins that benefit us immediately, and projects we are cultivating in the business development pipeline are also expected to bring thousands of new jobs to Florida in the coming years. Diversification of the marketplace continues to be our key to success, and this year, we had six project announcements that I believe deserve special recognition. Each is a little different – and point to both traditional and innovative aerospace-related wins. Within this report, I'm pleased to provide you with personal narratives from leadership at each of these six companies. We feel that hearing the point of view of the customer speaks volumes, as you review our progress for FY2012.

The close working partnerships we hold with Governor Rick Scott, our Lt. Governor and Board Chair Jennifer Carroll, our Board of Directors, Enterprise Florida, Workforce Florida, the Florida Department of Transportation, local EDCs, industry partners, and federal and state government officials, are the lifeblood of our success. I hope you will enjoy reading the highlights of the Space Florida story this year, and I look forward to sharing more outstanding accomplishments with you in 2013.

Sincerely,

A handwritten signature in black ink that reads "Frank A. DiBello". The signature is fluid and cursive.

Frank A. DiBello  
President & CEO  
Space Florida



# SPACE FLORIDA LEADERSHIP

## BOARD OF DIRECTORS:



**Lt. Governor Jennifer Carroll**  
Chair  
State of Florida



**Jay Beyrouti**  
President  
Monicarla, Ltd.



**Jesse Biter**  
President/CEO  
Biter Enterprises, LLC



**Ron Campbell**  
Director  
The Seminole Companies



**Hayden Dempsey**  
Chair  
Florida Governmental Affairs Practice  
Greenberg Taurig



**Debra Duvall**  
Partner  
Water Pointe Realty Group



**William T. Dymond, Jr.**  
President, CEO and Managing Partner  
Lowndes, Drosdick, Doster, Kantor & Reed



**Danny Gaekwad**  
Chief Executive Officer  
NDS USA Information Technology  
& MGM Hotels, LLC



**Belinda Keiser**  
Vice Chancellor  
Keiser University



**Chris Kise**  
Partner  
Foley Lerner



**Fred Leonhardt**  
Senior Partner  
Gray-Robinson PA



**Henry Rodriguez**  
Founder and Chief Executive Officer  
Woodmere Capital Management



**Hal Valeche**  
President  
York Street Capital Advisors



# SPACE FLORIDA LEADERSHIP

## EXECUTIVE STAFF:



**Frank DiBello**  
President and CEO



**Howard Haug**  
Executive Vice President, Treasurer  
and Chief Investment Officer



**Denise Swanson**  
Chief Financial Officer and  
Chief Administrative Officer



**Jim Kuzma**  
Senior Vice President and  
Chief Operating Officer



**Percy Luney**  
Vice President, Education, Research  
and Development, and Workforce



**Bernie McShea**  
Vice President,  
Business Development



**Mark Bontrager**  
Vice President,  
Spaceport Operations



**Keevin Williams**  
Vice President, Special Projects and  
Strategic Initiatives



**Chris Snow**  
Senior Director,  
Government Relations



**Dale Ketcham**  
Chief of Strategic Alliances



**SPACE FLORIDA** is the State of Florida's spaceport authority and aerospace economic development agency. Our mission is to advance the state's aerospace industry and ensure Florida maintains global leadership in the aerospace marketplace.

## FLORIDA'S RECENT AEROSPACE ECONOMIC DEVELOPMENT ACCOMPLISHMENTS

**SPACE FLORIDA** provides \$35 million investment for Lockheed Martin refurbishment of the Kennedy Space Center (KSC) Operations and Checkout Facility, creating a modernized processing site for the Orion Crew Exploration Vehicle Program. First two vehicles delivered July 2012.

**FEBRUARY 2011:** **SPACE FLORIDA** and Bigelow Aerospace sign Memorandum Of Understanding to market its inflatable, orbiting R&D complex.

**MAY 2011:** Masten Space Systems signs contract with **SPACE FLORIDA** to conduct demonstration launches from Launch Complex 36 at Cape Canaveral.



**OCTOBER 2011:** Boeing, **SPACE FLORIDA** and NASA-KSC announce the establishment of its Commercial Crew Program Office in Florida.

**SPACE FLORIDA** and the Instituto Nacional de Técnica Aeroespacial (INTA) sign a Memorandum Of Understanding during a Spanish trade mission to further enhance business development opportunities between Florida and Spain in the aerospace sector.

**SPACE FLORIDA** and UK-Based ADS sign Memorandum Of Understanding during overseas trade mission.

**DECEMBER 2011:** Eisenhower Center For Space And Defense Studies Hosts First Annual U.S Space Forum, sponsored by **SPACE FLORIDA**.



2011



**JANUARY 2011:** **SPACE FLORIDA** Receives IDIQ Contract from Department Of Defense with a maximum \$48 million value to provide Florida-based Minotaur launches for the federal government from Launch Complex 46 at Cape Canaveral.



**APRIL 2011:** **SPACE FLORIDA** provides \$1.1 million to AAR for hangar space at Melbourne International Airport and announces 225 new jobs within six months.

**SEPTEMBER 2011:** **SPACE FLORIDA** invests \$1 million in Cella Energy Limited to establish a new facility at KSC.

**SPACE FLORIDA**, the Space Coast Energy Consortium, Brevard Workforce and the Technological Research and Development Association (TRDA) awarded \$2.2 million in Federal grants to develop a clean energy hub in Central Florida.

NASA finalizes Cooperative Agreement with Florida-based CASIS to manage the International Space Station (ISS) U.S. National Laboratory

**SPACE FLORIDA** and TRDA partner to present the Igniting Innovation Showcase enabling 10 high-tech start-ups to present to national financiers in Cape Canaveral, resulting in several partnerships to grow these businesses.

**NOVEMBER 2011:** Florida-based L2 Aerospace's Instant Eyes™ mini UAV technology receives *Popular Science* "Best Of What's New" honor.

**SPACE FLORIDA** and Lockheed Martin announce project to manufacture and test Marlin™ autonomous underwater vehicles (AUVs) at Riviera Beach site.

**SPACE FLORIDA** is enabling significant growth of the aerospace industry in Florida and continues



In the last 12 months alone, **Space Florida** has enabled 15 new or growing aerospace-related programs to thrive in our state, resulting in an anticipated 1,791 jobs within the next five years. This has been accomplished with **Space Florida**

providing only 9 percent of the overall investment for these companies. Currently, the agency has more than 80 working projects in the pipeline, representing the potential for an additional 7,609 jobs within five years.

#### JANUARY 2012:

##### SPACE FLORIDA

announces Sub-Orbital Flight Incentive Program providing partial reimbursement for customers to fly research payloads from Florida.

Florida's major aerospace players represented at Florida Space Day in Tallahassee.

**SPACE FLORIDA** provides \$62+ million in conduit financing to support the build-out of the Space Shuttle Atlantis exhibit at Kennedy Space Center Visitors Complex. Groundbreaking occurs in January 2012.

#### MAY 2012:

SpaceX successfully launches the Falcon 9/Dragon Capsule mission from Florida that leads the way for next-generation U.S. commercial space initiatives – reducing our dependence on other countries to ferry cargo to and from the ISS.

Exploration Park – a cutting-edge R&D complex on KSC grounds – achieves milestone in horizontal infrastructure build with the opening of the park's first road, providing more direct access to the Space Life Sciences Lab.

Sierra Nevada Corporation announces interest in Florida as a base for its commercial human spaceflight programs and facilities.

#### JULY 2012:

Rocket Crafters announces intention to bring Corporate Headquarters to the Space Coast Regional Airport in Titusville.

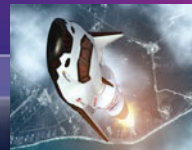
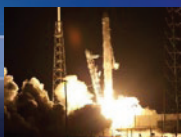
**SPACE FLORIDA** Signs Agreement With ENSCO, Inc. to lead a statewide Unmanned Aerial Systems (UAS) Initiative.

**SPACE FLORIDA** meets with 22+ companies at the Farnborough International Air Show to explore new opportunities for Florida.

**SPACE FLORIDA** and the FAA announce findings from a Tauri Group 10-year study on the potential of the suborbital marketplace.

#### AUGUST 2012:

NASA announces Commercial Crew Integration Capability (CCiCap) winners as The Boeing Company, SpaceX and Sierra Nevada – all having or planning a Florida presence and working with **SPACE FLORIDA** on infrastructure and/or program support to lead next-generation U.S. commercial space initiatives.



2012

#### MARCH 2012:

Embraer announces new Engineering and Technology Center USA, bringing 200+ new engineering jobs with average salaries of \$70,000.



#### APRIL 2012:

CoreNet Global, a leading association of corporate real estate executives, presents **SPACE FLORIDA** with its 2012 Economic Development Leadership award for the Boeing Commercial Crew facility project at KSC.

CASIS and Nanoracks sign agreement to conduct commercial research on ISS.

HB 59 is signed into law by Gov. Scott that adds Cecil Field to the statutorily designated Florida Spaceport Territory

#### JUNE 2012:

Craig Technologies signs a NASA Space Act Agreement for utilization of KSC equipment and facilities tied to the Space Shuttle program. **SPACE FLORIDA** and the Economic Development Commission of Florida's Space Coast to assist with marketing these capabilities to outside companies.

The Center for the Advancement of Science in Space (CASIS), the Florida-based manager of ISS utilization, announces its first Solicitation For Proposals: Advancing Protein Crystallization In Microgravity.

CASIS and The American Astronautical Society organize the 1st Annual ISS Research and Development Conference, fostering interest from industry in conducting cutting-edge research about the National Lab.



**FOR MORE INFORMATION:  
WWW.SPACEFLORIDA.GOV  
321-730-5301**



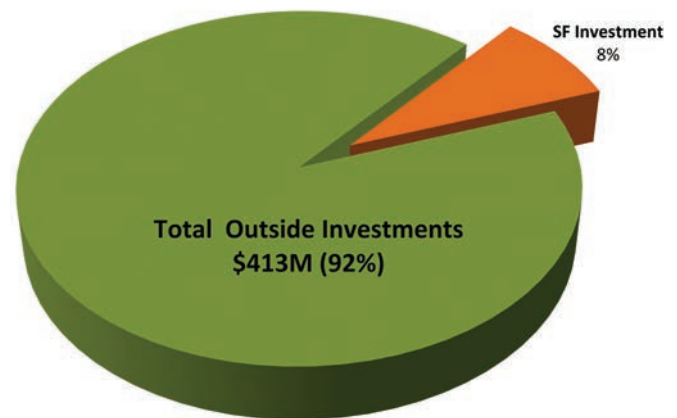
to work hard to ensure our state remains a global leader in space and aerospace initiatives.

# WELCOME TO THE 2012 SPACE FLORIDA ANNUAL REPORT

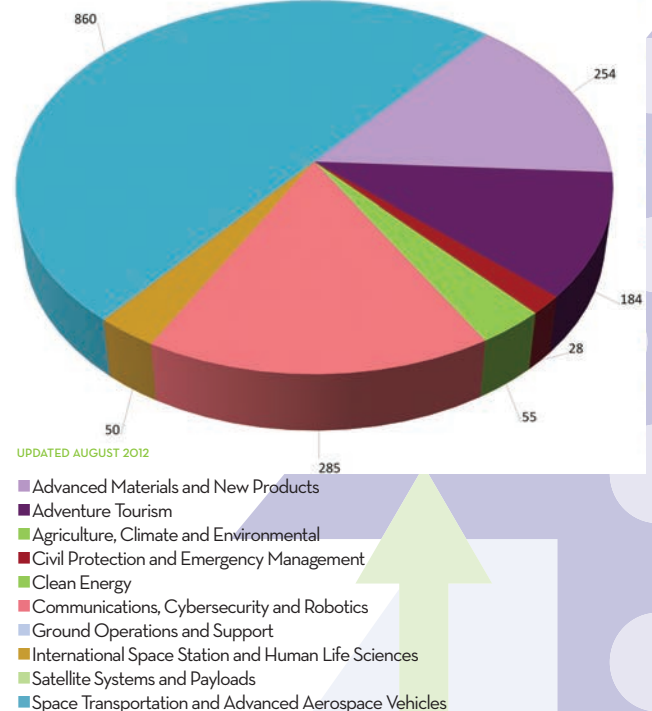
This has been a significant year for the growth of Florida's space and aerospace industries. Florida Governor Rick Scott and Lt. Governor and Space Florida Chairman of the Board Jennifer Carroll played a significant role in this growth, leading the effort with Space Florida to engage companies across Space Florida's 10 industry sectors of focus. As a result, we have captured deals that are estimated to result in 1,716 jobs over the next five years. During FY 2012, we showed a major strength in leveraging our financing networks and State-granted empowerments. This resulted in Space Florida providing only 8% of the total necessary investments, which led to a prosperous year.

While there are numerous wins to talk about in FY2012 - there were a select number of accomplishments that we are particularly proud of. Within the pages of this report, you will see personal narratives by leadership from these companies, that help to tell the story of their success in working with our organization.

## STRATEGIC INVESTMENTS FOR CAPTURED PROJECTS



## EMPLOYMENT FOR CAPTURED PROJECTS PROJECTED OVER FIVE YEARS

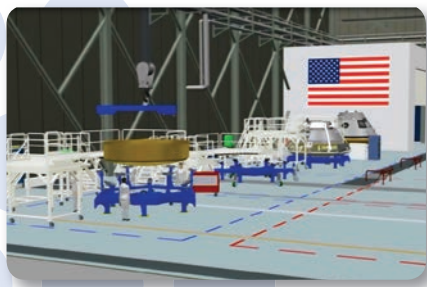


**THE BOEING COMPANY AT OPF-3:** Space Florida worked an innovative, award-winning lease agreement through NASA/KSC and Boeing to establish The Boeing Company's Commercial Crew Program office at Orbiter Processing Facility (OPF-3), legacy Space Shuttle infrastructure.

The Boeing Company announced plans to consolidate its Commercial Crew Program Office, manufacturing capabilities and overall

operation at Kennedy Space Center in October 2011. The OPF-3 was secured through a unique leasing arrangement between NASA/KSC and Space Florida. In FY2012, the facility was maintained by Space Florida to ensure readiness for initiation of manufacturing, assembly and test of the company's Crew Space Transportation (CST-100) spacecraft.

Agreements between Space Florida and NASA/KSC were finalized this year for an official transfer of facilities, operational responsibilities and maintenance at OPF-3 (now called the C3PF - "Commercial Crew and Cargo Processing Facility"), and development of operations and maintenance agreements and RFPs are currently in progress.



In August 2012, The Boeing Company was named by NASA as one of the three winners in the Commercial Crew Integration Capability (CCiCap) procurement selection process, ensuring a ramp-up of the C3PF utilization via Space Florida in FY2013. As a result of the award, The Boeing Company anticipates creating up to 550 new jobs over the next several years.

Space Florida was presented with the Economic Development Leadership Award by CoreNet Global - the world's leading association for corporate real estate and workplace professionals, service providers and economic developers - for the lease agreement the organization facilitated through NASA/KSC for Boeing to establish their Commercial Crew Program office at OPF-3. The Economic Development Leadership



Award recognizes best practice and innovations in economic development representing national, state, regional and local interests.

Today, the C3PF is in the midst of demolition work to prepare the building for its new, commercial manufacturing focus.



## MARK JAGER

**Director of Florida Operations and CAPPS Program Manager**

(Checkout and Payload Processing Services)

**THE BOEING COMPANY**

"Working with Space Florida has provided a significant benefit for Boeing's Florida Operations as we grow our Commercial Crew footprint at Kennedy Space Center.

When Boeing started looking for a location to establish its next-generation Commercial Crew Program, several states were considered. We wound up choosing Florida - not only because of the site's close proximity to the launch vehicle and the talented workforce already positioned in the area - but also because of the unique incentive packages (financial and otherwise) Space Florida put together in partnership with NASA-KSC for utilization of excess Shuttle-era infrastructure.

In any project like this, where state and federal agencies work together with commercial industry, there will be challenges to overcome. This particular scenario was completely groundbreaking in the sense that Space Florida was able to work with KSC officials

to successfully and quickly secure management over NASA infrastructure for commercial use. This was a first-of-its-kind deal, winning numerous awards from the International Economic Development Council and CoreNet for its innovation. I believe that the partnership that enabled this project will serve as an example for many other U.S. companies moving forward.

I am a big fan of Space Florida. They are a truly unique organization doing an excellent job of educating stakeholders about the key role of the aerospace industry in meeting the State's economic and workforce development goals. Space Florida's leadership is vocal when it comes to the needs of the commercial sector - they are an advocate for us - and that assistance is exactly what our company needs to thrive here as we establish and expand our Commercial Space Transportation (CST-100) program. We look forward to continuing our work with Space Florida to ensure success of our new Commercial Crew operations here."





**CELLA ENERGY:** Space Florida supported U.K.-based Cella Energy in the establishment of its first U.S. R&D facility aimed at commercializing breakthrough hydrogen storage technologies in the North American market. Space Florida provided the investment funding to develop four proof-of-concept projects and expand operations for Cella. The company is obtaining matching funds from the U.K. Government as well.

Space Florida also worked with Cella to provide a mutually beneficial lease for space at the Space Life Sciences Lab at KSC, where the company established its U.S. operations.

Cella's groundbreaking technology could lead one day to lower priced fuel at the pumps, and improve energy security in the United States, the European Union, and throughout NATO.

Cella plans to develop its safe, low-cost hydrogen storage materials both at the British Government's prestigious Science

and Technology Facilities Council's (STFC's) Rutherford Appleton Laboratory near Oxford, U.K. and in its new facility at the Space Life Sciences Lab at KSC.

Over 30 years NASA/KSC has become one of the largest users of hydrogen, and has built unique expertise in this area. Cella's technology allows hydrogen to be stored without high pressure tanks and other potential safety hazards normally involved with hydrogen gas.

Hydrogen, which produces only pure water when burned, is considered an ideal solution to cutting carbon emissions from road vehicles. This process causes 25 percent of the carbon release in developed countries like the U.S. and U.K.

Companies like Cella are leading the way in keeping Florida a driving force in alternative energy. Space Florida will continue to leverage its financing relationships to help companies like Cella succeed.



**DR. STEPHEN PERUSICH**  
Senior Scientist and Lab Manager,  
CELLA ENERGY U.S., INC.

Cella Energy, LTD. was conceptualized by Stephen Voller and Professor Steve Bennington in England in January 2011. After less than a year in business, they wanted to expand the company and start a laboratory in the USA. Space Florida then began discussing opportunities at Kennedy Space Center (KSC). For the work Cella had in mind, KSC was the perfect location, considering the unique infrastructure resources and workforce capabilities stemming from the area's 50-year history in space-related work.

Florida had a lot to offer in addition to the incentive packages that we were able to secure through Space Florida and the State. The lack of a state income tax, the quality of life, the outstanding educational institutions, beautiful weather – were all reasons to establish our U.S. operations here. Also, Florida's Lt. Governor and Space Florida leadership took the time to travel to England to meet with Cella and learn how to most effectively address the unique needs of our growing business.

During the process of establishing our U.S. lab, several scientists from Cella's U.K. laboratory traveled to Florida and stayed sometimes for months at a time. Space Florida was always there for us throughout the transition – facilitating KSC badging for our foreign nationals, to moving equipment, and managing laboratory expansion challenges. Space Florida's employees are some of the nicest individuals I've had

**"The work that Space Florida does is crucial, because if we continue to grow (and other Space Florida-supported businesses like us continue to succeed) – I believe you will see a significant commercial revitalization of the local economy. We look forward to being part of that growth."**

the pleasure of working with, and continue to be available to assist our ongoing needs.

In the past year, Cella's U.S. lab has been growing – with the addition of Dr. Sean McGrady and Dr. Gang Liu. We plan to continue adding several more professionals in the upcoming year. We are doing some exciting work on new hydrogen storage composite materials at the

Space Life Sciences Lab (managed by Space Florida), which have applications in radiation shielding, transportation and UAVs, among others.

We are thankful that Space Florida and the State of Florida decided to make a strategic investment in Cella Energy, and I am confident they will continue to do what it takes to help us succeed. The work that Space Florida does is crucial, because if we continue to grow (and other Space Florida-supported businesses like us continue to succeed) – I believe you will see a significant commercial revitalization of the local economy. We look forward to being part of that growth.

As we grow our U.S. operations, Space Florida continues to make important introductions for us in the civil, military, and commercial sectors. When we have questions about new financial opportunities, they provide us with the data needed to refine our U.S. market strategy. Space Florida is our landlord, investor, problem solver, and in many ways a collaborator, helping us and cheering us on to succeed."



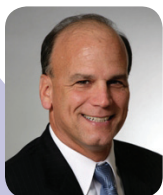
**EMBRAER:** In March 2012, Embraer, a Brazil-based aircraft manufacturer focused on commercial, defense and executive aviation, partnered with Space Florida to announce plans to construct a 67,000 sq. ft. engineering design center focused on aviation R&D and design work at Melbourne International Airport. Space Florida will finance, build and own the Embraer facility, which is expected to employ about 200 engineers and other highly skilled workers, with average annual salaries of \$70,000. Space Florida will finance \$18.2 million for the project, with another \$6 million coming from the Innovation Incentive Fund.

At the announcement, Florida Governor Rick Scott noted, "Embraer's continued investment in Florida is evidence we are doing the right things to attract job-growing businesses."

The new Embraer facility will house R&D for the company's Executive Jets business. The company broke ground on its new facility in November 2012.

The development of the Embraer Engineering and Technology Center U.S.A, Inc. was a perfect example of a team effort between agencies - Space Florida, Enterprise Florida and the local EDC.

The Research and Development Center is the third recent investment for Embraer in Florida. Embraer officially began its Melbourne operations in February 2011 at its 80,000 sq. ft. final assembly facility at Melbourne International Airport. Embraer manufactures the Phenom 100 executive jet at this location. It dedicated its 58,000 sq. ft. global Embraer Executive Jets Customer Center in December 2011, rounding out the company's \$50 million investment in the Space Coast to date.



**GARY J. SPULAK**

President,  
Embraer Aircraft Holding  
EMBRAER

"Over a year ago, we began working with Space Florida on establishing the first Embraer Engineering and Technology Center outside of Brazil in Florida. The benefits of working in Florida have been well known to us since we established our first facility in Fort Lauderdale - our North American headquarters - in 1979. However, the diligent efforts of Space Florida, and our other great partners, allowed us to expand our growing presence in the Melbourne area.

A few years back, we started planning the development of an aeronautical complex that includes the production facility for the Phenom 100 and Phenom 300 aircraft as well as the global customer center and headquarters for Embraer Executive Jets. We already knew that Florida is a very business-friendly environment, and in developing these operations in Melbourne, we found the area to be attractive for our customers, visitors and for our prospective employees. We also learned about the community's large, qualified workforce and the availability of "Greenfield" land at the airport.



Once our production facility and customer center operations were open, Space Florida acted as an important partner in creating a true vision using Brevard County and Melbourne International Airport as a solution to the challenge of creating our first U.S. based Engineering and Technology Center and in developing a creative strategy to bring this vision to life.

We broke ground on the Center in December. In the interim, we opened temporary offices where we already have about a dozen employees, including some from the Kennedy Space Center. As we ramp up and complete hiring in 2016, we plan to have 200 high-value jobs at the Center. Without the strong partnership forged between Embraer, Space Florida and the local community this would not be possible."



## LOCKHEED MARTIN'S "PROJECT

**MARLIN":** Space Florida and Lockheed Martin announced the Marlin project in Riviera Beach in November 2011. As a result of the Space Florida investment, Lockheed Martin Undersea Vehicle Systems constructed two final stage prototypes of its Marlin Autonomous Underwater Vehicle (AUV) at its Palm Beach County facility, creating more than 50 new jobs to date. Lockheed will test these vehicles in both the Atlantic and Gulf waters around Florida. Target market applications for the Marlin AUV include inspection of underwater oil and gas infrastructure and military operations. Lockheed Martin conservatively estimates the potential market for the Marlin AUV as several billion dollars annually, with commercial production of the vehicles to take place at the Riviera Beach site.

Space Florida provided a \$3 million equity contribution from the financing fund provided by the Florida Legislature, and secured \$5 million in commercial financing to fund the balance of the project's cost.



The technology employed in several areas of the Marlin AUV (e.g., sensor and guidance systems) has much in common with aerospace vehicles. This business model fits well with Space Florida's strategy of leveraging aerospace-related technology in growing the industry.



### EDMUND SHEA

Senior Manager, Business Operations,  
Missions and Unmanned Systems  
LOCKHEED MARTIN

**LOCKHEED MARTIN**



"I've been with Lockheed Martin for more than three decades, and our new Marlin™ autonomous underwater vehicle (AUV) is one of the most exciting technological developments we've had the opportunity to bring into the commercial marketplace. The Marlin/Space Florida agreement is truly a successful public-private partnership, an example of how government and industry can work together to bring about innovation and create jobs.

Our experience working with Space Florida is very positive, and we are grateful to Space Florida for recognizing the importance of the work we do in our Palm Beach facility.

**"We at Lockheed Martin are very proud of our partnership with Space Florida, and we look forward to discovering future opportunities for our business in Palm Beach County."**

This contract with Space Florida played a critical role in enabling Lockheed Martin to get Marlin out to sea to inspect subsea infrastructure that is critical to Florida's maritime industry and resources. Space Florida made it possible to get Marlin to market earlier than Lockheed Martin could have done on its own. Using

its State empowerments, Space Florida facilitated a unique sale/leaseback arrangement for Lockheed Martin.

Not only did a dynamic product come of this contract, but also a prosperous relationship. We at

Lockheed Martin are very proud of our partnership with Space Florida, and we look forward to discovering future opportunities for our business in Palm Beach County."

**SPACEX:** In May 2012, SpaceX launched a Falcon 9 rocket from Cape Canaveral that led to the successful demonstration of the capsule's docking capabilities to the International Space Station (ISS). This mission paved the way for next-generation U.S. commercial space initiatives, reducing our dependence on other countries to ferry cargo to and from the ISS.

To date, SpaceX is leading the commercial space industry in demonstrating cost effective and timely cargo delivery capabilities to the ISS. The successful docking of the Dragon capsule – a major milestone in NASA's Commercial Orbital Transportation Services (COTS) program – also marked the beginning of commercially enabled, cutting edge research opportunities and access on

board the unparalleled microgravity environment of the U.S. National Lab.

Space Florida is working closely with companies like SpaceX to ensure that they have the infrastructure, incentives, workforce and political credibility they need to help Florida continue to shine as the birthplace of next-generation U.S. commercial space launch and exploration initiatives.



**BRIAN MOSDELL**  
Director of Florida Launch Operations  
SPACEX

"As the Director of Operations for SpaceX here in Florida, I have had the pleasure of working closely with Space Florida for the past few years. The organization played a key role in facilitating the establishment and growth of our Florida site since I joined SpaceX in 2008.

Early on, during our start-up phase here, Space Florida provided us state-of-the-art office space close to the launch site – a critical element to getting our program up and running. The Launch Control Center at Space Florida's South Campus enables us to operate in a comfortable, private control room and launch operations environment with easy access that doesn't require badging to get on-site – a plus when it comes to customer access prior to, during and following launch.

With the financial help of Space Florida over the years, SpaceX was also able to build a world-class launch facility, creating well-paying construction jobs in the area. We were also able to implement an offsite processing capability at Hangar X in the Cape Canaveral industrial area, used to check out flight hardware. Space Florida also arranged to secure surplus NASA rail cars and pressure vessels to optimize our operations on a lean budget.

Most recently, SpaceX worked with Space Florida to facilitate support from the Florida Department of Transportation on some sizeable upcoming projects – including the further development of Launch Complex 40 with a payload processing facility, and building heavy-lift launch pad infrastructure at Complex 40 North.



As you can imagine, the success of these projects will greatly increase launch throughout over the coming years, which only benefits the local and state economies.

SpaceX anticipates bringing on hundreds of additional employees in the next three to five years, assuming our programs continue as planned.

Ultimately, our goal is to launch and recover the first stage and Dragon capsule, then refurbish them here in Florida – which will create additional jobs. Currently, we have five launches scheduled for 2013, and that number will likely double within the next two years. If all goes as planned, SpaceX will continue to grow quickly, with the continued assistance of Space Florida.

Moving forward, we will continue to work with Space Florida to optimize land and facility acquisitions and refurbishments, giving us additional offline processing capabilities and possibly even additional launch pad capabilities.

Together, Space X and Space Florida have broken a lot of barriers and overcome many challenges. Understanding the commercial model as Space Florida does, gives us confidence that they will continue to aid in our success."



**XCOR AEROSPACE:** Space Florida engaged in extensive negotiations with XCOR – a leader in the horizontal, reusable space launch market – to assemble an infrastructure and financing package that will support the establishment of the company’s assembly and launch operations here in Florida. As a result, an estimated 150 new jobs will be created through 2018. A formal announcement of the company’s decision to establish its East Coast manufacturing and assembly center for the XCOR Lynx Mark II suborbital vehicle in Florida took place in August 2013, featuring U.S. Senator Bill Nelson, Florida Lt. Governor and Space Florida Board Chair Jennifer Carroll, and NASA Chief of Staff, David Radzanowski.

In the coming months, Space Florida will continue to work closely with XCOR to ensure their Florida-based business plan is realized. There is significant economic potential for the suborbital marketplace in Florida, and Space Florida will continue to leverage



its public and private sector partnerships to improve Florida’s aerospace economy through the growth of companies like XCOR.



## ANDREW NELSON

Chief Operating Officer  
XCOR AEROSPACE

“At XCOR Aerospace, I am responsible for the business and operational side of the company that includes the eventual establishment of sites around the world. Since I joined the company in 2008, I’ve had contact with Space Florida many times – mainly to determine if the state of Florida was a solid match for XCOR to establish operational and manufacturing sites. After establishing a good rapport with Space Florida’s leadership and learning the competitive advantages of locating within the state, we decided to take the next step.

Throughout the process, Space Florida provided us with institutional support and facilitated critical relationships with NASA-KSC and the 45th Space Wing that enabled us to understand important processes, protocols, and identify infrastructure that are important for future operations. Even more importantly however, Space Florida was able to bring an aggressive financial component that will enable us to expedite the establishment of an XCOR footprint in Florida.



In addition to financial and infrastructure incentives Space Florida brought to the table, the Space Coast itself has unique assets that operational and manufacturing companies value... for example, a distinctive pool of skilled technical and operational personnel that know the importance of doing safety critical processes the same way every time. I assume this stems from the NASA- and DoD-related activities that have taken place in the area for the past 50 years. The technical skills we require for our own workforce are integral in the local DNA already.

Kennedy Space Center and Cape Canaveral Air Force Station also provide a distinct advantage when it comes to the environment of safety engrained here through years of spaceflight execution.

We are excited to contribute to the dynamic space marketplace in Florida and look forward to being a part of the revitalization of local industry. The growth we are experiencing would not have been possible without the assistance of an organization like Space Florida. We are thankful for their commitment to commercial space and look forward to continue partnering with them as our company grows.”

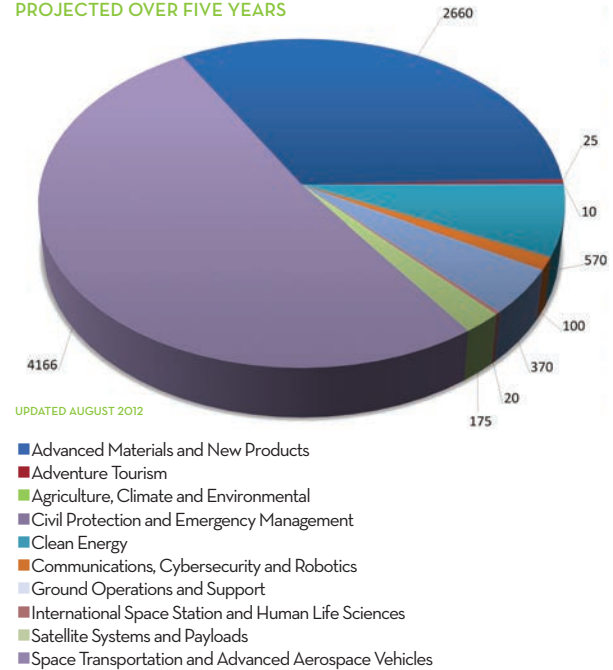
## A BRIGHT FUTURE

In addition to the projects highlighted in the previous section, there were other significant wins for Florida in FY2012. In August, NASA announced the winners of CCIcap as The Boeing Company, SpaceX and Sierra Nevada Corporation. CCIcap supports NASA's next-generation Human Spaceflight Program – promoting the development of a renewed human crew transportation capability to and from the International Space Station (ISS) – enabled by U.S. commercial space transportation partners. The selection of these companies – all having or planning a Florida presence, and working with Space Florida on infrastructure and/or program support – is a huge win for the state of Florida.

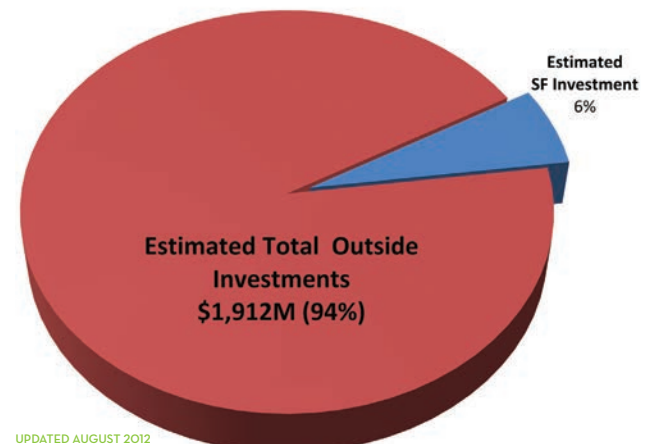
While the wins noted in this report are merely a highlight of Space Florida's accomplishments over the past year, they reflect the diversification strategy that the organization believes will serve as the key factor to the growth of Florida's aerospace economy moving forward. By supporting the efforts of both large government contractors (i.e. Lockheed Martin and The Boeing Co.), emerging commercial space transportation providers (i.e. SpaceX and XCOR), and diversified companies developing new technology and products (i.e. Embraer and Cella), Florida will achieve a greater level of success in developing new jobs for our state.

It is important to note that most of the accomplishments highlighted here were made possible by spaceports infrastructure and business finance funding provided to Space Florida by Florida's Legislature. The foundational funding our organization receives from the State is critical to the success of any of our business development initiatives. For that reason, we look forward to working with incoming Senate President Dan Gaetz and incoming House Speaker Will Weatherford to make sure that similar resources are available in the coming years to continue to support high-potential projects currently in our business development pipeline. We also extend a special thanks to outgoing Senate President Mike Haridopolos and House Speaker Dean Cannon for their support and leadership over the last two years!

## ESTIMATED EMPLOYMENT FOR PROJECTS IN THE PIPELINE PROJECTED OVER FIVE YEARS



## SPACE FLORIDA ESTIMATED STRATEGIC INVESTMENTS





## GROWING FLORIDA'S SPACEPORTS

Space Florida is dedicated to creating a network of horizontal and vertical, commercial-friendly spaceports across the state, giving Florida a competitive edge in the U.S. marketplace. A few significant initiatives took place in FY2012 to ensure the continued growth of this network.

**Spaceport Direction for FDOT (SB643):** Representative Workman and Senator Benacquisto sponsored Senate Bill 643 in FY2012, helping to institutionalize the process of pursuing spaceport projects through the FDOT. Within this Bill, language defined “launch support facilities” in broader terms, enabling critical spaceport infrastructure funding to be included within FDOT’s Five-Year Work Program. These funds included \$15 million for specific Spaceport infrastructure projects. On August 4, 2012, this Bill was signed into law by Governor Rick Scott.

**Cecil Spaceport:** In FY2012, Space Florida worked hand in hand with the State Legislature, the Jacksonville Aviation Authority (JAA) and the FAA to award Cecil Field an FAA horizontal spaceport license. House Bill 59 (sponsored by Senator Wise and Representative Ray) allowed Space Florida to include Cecil in its Master Planning efforts and deem it an official “Spaceport Territory.” This bill allowed for space-specific infrastructure upgrades to Cecil Field, preparing it for future horizontal launch customers.

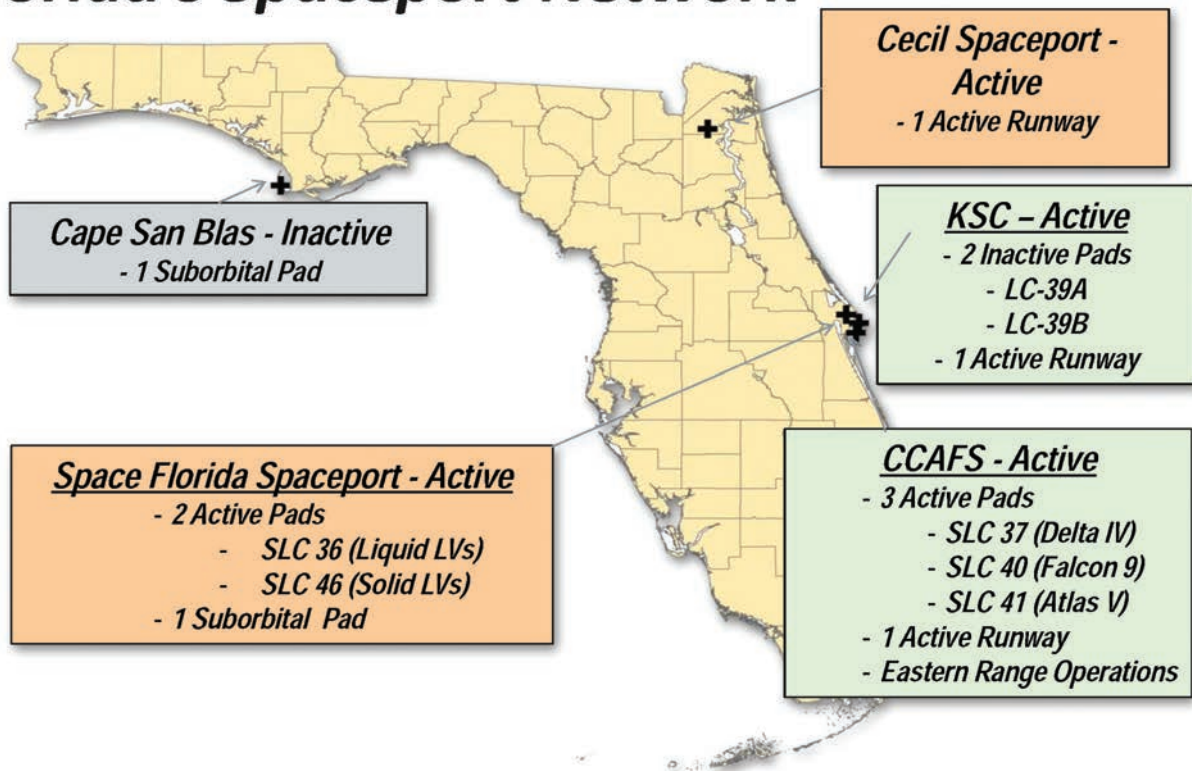
**FDOT Partnership:** Space Florida worked closely with the FDOT office in FY2012 to draft Scopes of Work associated with the Florida

Spaceport Systems Plan and the Florida Spaceport Master Plan. In these documents, Space Florida proposed a statewide inventory of aerospace assets and a facility infrastructure agreement for the development of the LC-40 Integration and Encapsulation facility. Space Florida released an RFP for the “Spaceport Systems Plan” and selected a lead contractor. The plan will be developed with FDOT guidance and is expected to be completed by first quarter of FY2013.

**Project 21 GSP:** At Kennedy Space Center, work continues to enhance and repurpose existing onsite facilities and infrastructure to support the development of a 21st Century Spaceport that is friendly to commercial business. In FY2012, Space Florida participated in numerous technical interchange meetings with Kennedy Space Center (KSC) on their “21st Century Ground Systems Program” (GSP) effort (formerly known as “21st Century Space Launch Complex”). NASA defined improvements that would enhance the effectiveness and access to KSC and the Eastern Range by commercial launch providers. The program plan included a process to define the improvements and associated investment strategies, a plan to re-purpose excess facilities, and it required immediate and continuing engagement with commercial and other spaceflight providers to assist in the identification and prioritization of activities.

Space Florida will continue to work with NASA/KSC leadership to explore the Future State Definition (FSD) of how to accommodate multiple users at the Spaceport.

## Florida's Spaceport Network



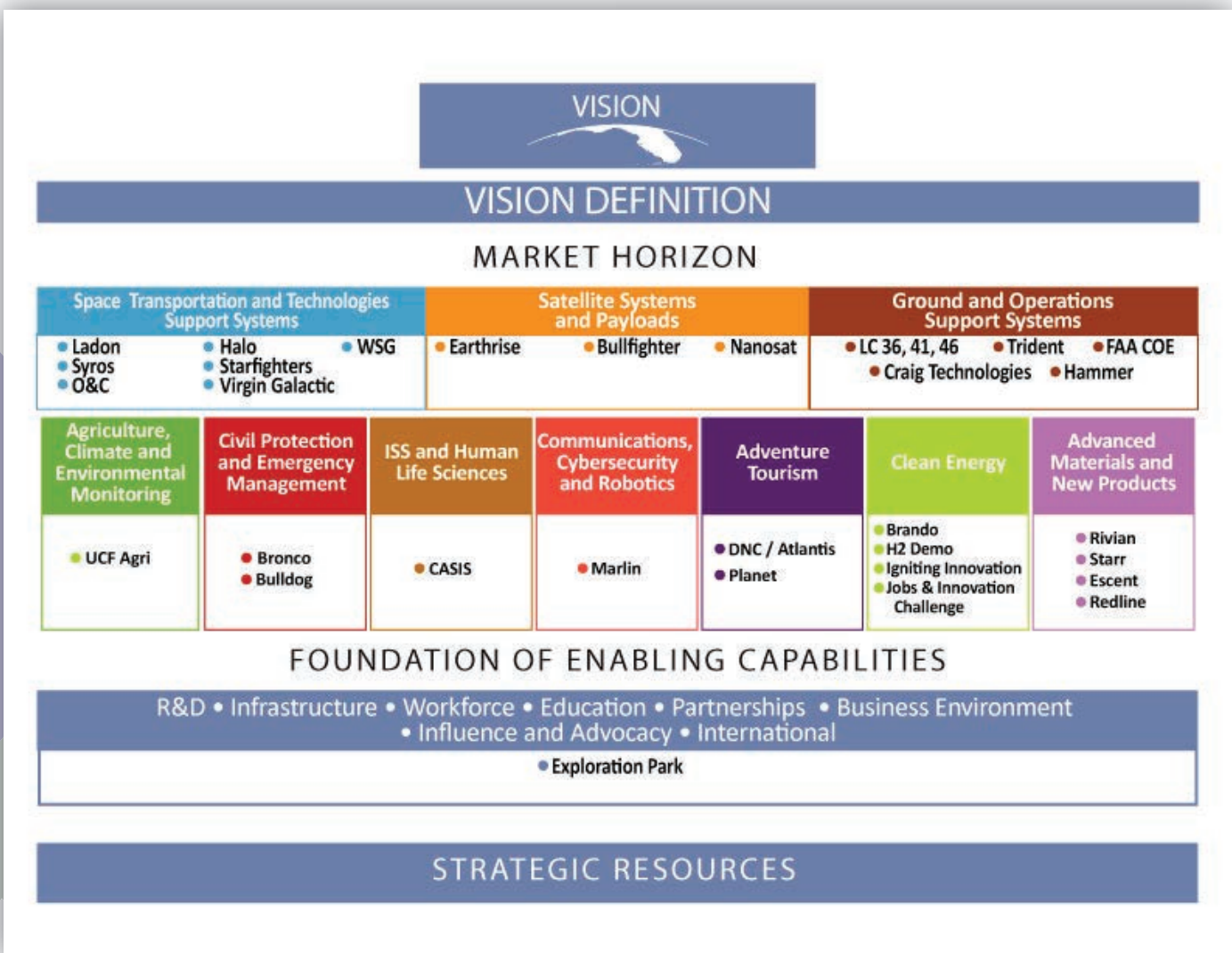


## VISION 2020

As a result of the dynamic nature of Florida's space industry and the retirement of NASA's Space Shuttle program, Space Florida developed, in 2009, a strategic plan ("Vision 2020") – a strategy that targets a number of diversified commercial market segments for integration of space technology that has not been previously pursued with a focused state effort (i.e. life sciences/pharmaceuticals, agriculture/climate monitoring, cyber security and robotics, clean energy, adventure tourism, civil protection and crisis management). These markets receive direct benefit through utilization of current aerospace programs, or have shown great interest in the potential to benefit from opportunities in next-generation aerospace initiatives and utilization of microgravity

environments. Space Florida has already gained significant interest from major players in these markets, and will continue to increase its efforts to attract and secure these businesses. We will do this, in part, by utilizing our operational budget to focus staff efforts on business development opportunities in these emerging sectors, with the goal of tripling the size of the space industry and our economic impact in Florida by 2020.

In addition to supporting a number of commercial aerospace market segments, funding also supports the care and maintenance of the State's spaceport operations, and enables opportunities for financing, research, workforce and business development efforts enhancing supply chain and other diverse business constellations.



## CUSTOMER SATISFACTION

Space Florida distributed its 2012 Customer Satisfaction Survey to 447 partners, customers and stakeholders that have regularly worked with the organization over the past 12 months. Space Florida received a 14% response rate from an extremely well qualified group during the four-week survey window. Critical insight was garnered into the needs of current and potential customers, as they made up more than 52% of the respondents.

In addition to current and potential customers, additional stakeholders from commercial, civil and military sectors participated. These organizations provided important insight into the perception of the overall effectiveness of Space Florida as a State public-private partnership, and the competitiveness of the aerospace industry in Florida as a whole.

### AREAS OF STRENGTH FOR SPACE FLORIDA

Overall, Space Florida and the State of Florida were rated highly by respondents, consistent with last year. In the area of “Business Climate” in particular, 85% of respondents believe Florida’s business climate is competitive with that of other states. This is a slight increase from the 77% of participants in 2011 that felt Space Florida was either “somewhat” or “very competitive” with other states. We believe this is directly attributable to broader communication of the organization’s financing tools and State empowerments. In open-ended questions, respondents said that they viewed Texas, Virginia, and New Mexico as the top competitors to Florida.

There was also a small, but significant, shift in what respondents felt was the most important financing tool for Space Florida to provide to new and expanding aerospace businesses in Florida. Early stage investment and low-interest financing topped this year’s list at a combined 70%, reflecting a real need in the marketplace for financing assistance.









In FY2012, diversification of the marketplace and providing aggressive financing packages remained a key strategy for Space Florida to increase aerospace-related job growth in the state. This year’s Customer Satisfaction Survey reflected that Space Florida remained – if not became more – competitive among contending states in FY2012.

Participants were asked to rate how successful they felt Space Florida’s business development efforts were in FY2012, given the current state of the economy in Florida and Space Florida’s budget and funding mechanisms. More than 65% of participants responded that they believed Space Florida’s business development efforts were successful in FY2012.

Also of note this year, 70% of respondents ranked Space Florida’s overall performance over the past 12 months as either “good” or “very good,” and 74% said that they would “definitely recommend” Space Florida as a business resource to others.

A majority, 62% of the participants, contacted Space Florida 7-12+ times over the past 12 months – showing that a majority of our respondents had regular contact with the organization throughout the year. In addition, 59% of respondents rated Space Florida’s overall performance in communicating regularly and effectively with customers and stakeholders either “good” or “very good” for FY2012. Overall, a majority of Space Florida clients appear to be satisfied with the interaction and attention they are receiving.








Using a scale from 1-7, with 1 being “very good” and 7 being “very poor,” please rate Space Florida’s overall performance over the past 12 months in each of the following focus areas:

Growing Florida’s Aerospace Economy			
1 - Very Good		36.51%	23
2		22.22%	14
3		11.11%	7
4		6.35%	4
5		4.76%	3
6		6.35%	4
7 - Very Poor		7.94%	5
N/A		0.00%	0
Not Answered		4.76%	3
AVG: 2.7		TOTAL	100% 63

## GROWING FLORIDA'S AEROSPACE ECONOMY

Using a scale from 1-7, with 1 being "extremely successful" and 7 being "extremely unsuccessful," please rate how effective you feel

### 6 Space Florida's business development efforts were in FY2012, given the current state of the economy in Florida and Space Florida's budget and funding mechanisms.

1 - Extremely Successful		25.40%	16
2		39.68%	25
3		11.11%	7
4		12.70%	8
5		4.76%	3
6		1.59%	1
7 - Extremely Unsuccessful		0.00%	0
Not Answered		4.76%	3
AVG: 2.33		TOTAL	100% 63

Within the last year, 64% of participants have approached Space Florida with a project to expand, relocate, or create an aerospace or related business in Florida, and nearly 50% have expansion needs that could be supported by Space Florida in the coming year. With the majority of this year's respondents being current and potential customers, there is a real opportunity to apply Space Florida's financing tools in the months ahead.

### AREAS FOR GROWTH

While overall ratings on this year's survey were strong, a few areas were noted where Space Florida and the State of Florida have some room for improvement.

Two target stakeholder groups were under-represented in the survey responses this year - "DoD/Military" (0.00%) and "Federal Government Agency" representatives (non-NASA, non-DoD individuals - 0.00%). These remain important stakeholders to our business and we must look to engage more of them in future surveys.

Only a combined 19.05% of respondents felt that Space Florida's most valuable role was as a liaison - to NASA/KSC or the USAF/

Eastern Range, yet from Space Florida's perspective, one of its primary functions and benefits to the marketplace is this role.

In relation to open-ended questions, respondents continued to stress the importance of timely responses in accordance with Business Development funding applications and inquiries.

### EFFECTIVENESS OF LEGISLATIVE INITIATIVES

Respondents felt Space Florida's ability to achieve proactive State and Federal support for business development in the state was slightly improved from last year, but still had plenty of room for growth.

### CONCLUSION

Overall, the 2012 Customer Satisfaction Survey reflected a stakeholder base with growing confidence in Space Florida's strategic business strategies and recent accomplishments. While the numbers are positive, there remains room for improvement. Space Florida will gauge customer opinion on these same questions in 2013, to demonstrate continued upward momentum in overall business perceptions.



NOTES:









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